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Citation for published version:

Ibrahim, E & Harrison, T 2019, 'The impact of internal, external and competitor factors on marketing strategy performance', *Journal of Strategic Marketing*. <https://doi.org/10.1080/0965254X.2019.1609571>

Digital Object Identifier (DOI):

[10.1080/0965254X.2019.1609571](https://doi.org/10.1080/0965254X.2019.1609571)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Peer reviewed version

Published In:

Journal of Strategic Marketing

Publisher Rights Statement:

This is an Accepted Manuscript of an article published by Taylor & Francis in Journal of Strategic Marketing on 2 May 2019, available online: <https://www.tandfonline.com/doi/full/10.1080/0965254X.2019.1609571>

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The impact of internal, external and competitor factors on marketing strategy performance

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ABSTRACT

Strategy formulation is commonly understood as the match between a firm's internal resources and skills and its external environment. Marketing strategy performance is the function of a dynamic, interactive process incorporating internal firm resources, external environmental factors and competitive actions. The study aims to assess the impact of competitor actions on marketing strategy performance. We develop a model that accommodates the effects of 29 variables (comprising internal marketing strategy variables, external environmental factors and competitors' marketing mix variables) on business performance. We empirically test the model using simultaneous equation modelling of time-series data on UK car manufacturers collected from publicly available resources and annual reports. The results show that external factors, in particular competitors' marketing mix elements, have a greater influence on a company's business performance than internal (marketing and non-marketing) strategy variables. Implications for marketing theory and management are discussed.

KEYWORDS

Marketing orientation/strategy, business performance, competitive context, simultaneous equation modelling.

1. INTRODUCTION

Developing a successful marketing strategy depends on an effective match between a firm's internal resources and skills and its external environment. In achieving this goal, various marketing strategy schools of thought place different emphasis on the importance of certain factors (Hunt & Derozier, 2004). Yet, the ultimate success of strategy depends on the competitive context: what works well in one competitive context may not work well in another. Marketing strategy is grounded in the theory of competition (Hunt 2015); it is not only affected by the firm's actions and the conditions of the external environment, but also by competitors' actions and reactions to the firm's marketing strategy (Hunt & Morgan, 1995).

Although competitive intelligence has been addressed extensively in previous research (e.g., Narver & Slater 1990; Jaworski & Kohli 1996; Calof & Wright 2008; Dishman & Calof 2008; Parnell et al. 2011), much of this has been conducted independent of the orientation of competitors in the industry (Kumar et al. 2011). Hence, the effect of competitor actions on firm strategy have been largely neglected or have not been examined explicitly. Thus, the measurement and quantification of competitive effects is essential to understanding the true impact of marketing strategy on business performance.

Informed by Resource-Advantage theory, we consider the effect of both firm and competitor resources on market strategy performance. We develop a conceptual model that accommodates three groups of variables and the relationships between them: the firm's internal resources (marketing and non-marketing), external environmental factors, and competitors' resources. We test the model using empirical data from the UK car market. The primary aim is to model the impact of competitor actions/resources on the firm's marketing strategy.

Our research makes both theoretical and managerial contributions. Theoretically, we contribute to marketing strategy by responding to the call for empirical testing of simultaneous relationships between configurations of multiple variables relating to strategy and environmental contingencies (Morgan, 2015), and thereby provide a deeper understanding of the dynamic effects

of marketing strategy variables on firm success. Few previous studies have systematically analysed the overall, simultaneous impact of internal and external variables (see Capon, Farley & Hoenig 1996; Hanssens, Parsons & Schultz 2001; Leeflang et al. 2000; Morgan et al. 2009). Additionally, we account for the competitive process, which remains under-researched, via incorporating competitor resources into the analysis. The study provides managers with guidance for improving marketing strategy effectiveness, in particular the interplay between internal and external strategy effects.

2. LITERATURE REVIEW

Marketing strategy performance is the function of a dynamic, interactive process incorporating internal resources, external environmental factors and competitive actions/resources (Hunt and Morgan 1996). Market Orientation literature acknowledges the importance of competitors, competitive intelligence and tracking competitor actions (Narver & Slater 1990, Joworski & Kohli 1996). The significance of competitors on marketing strategy effectiveness has been noted recently by several authors (Kharabsheh, Jarrar & Simeonova 2014; Sahi, Gupta & Lonial 2016), and competitive effects feature in the recently developed AUTOFLEX scale to measure marketing flexibility (Shalender, Singh & Sushil 2017). Yet, despite the recognition of the importance of competitors, Kumar et al (2011) suggests that much prior research has been conducted independently of the orientation of competitors, and questions whether market orientation can provide a competitive advantage if competitors are also market oriented. There has been limited attempt to model the impact of competitors' actions on firm marketing strategy effectiveness.

The extent to which strategy is effective, depends on the relative advantage a firm has over its competitors in the marketplace (Hunt and Morgan, 1995). R-A theory views competition as the disequilibrating, ongoing process that consists of the constant struggle among firms for competitive advantage in resources leading to superior marketplace position and financial performance (Hunt & Derozier 2004).

At its core, R-A Theory combines heterogeneous demand theory with the resource-based theory of the firm (Hunt 2015). The resource-based view considers the firm a ‘combiner of heterogeneous, imperfectly mobile entities or “resources” which, alongside heterogeneous demand, implies diverse levels of performance within an industry (Hunt and Morgan, 1995). The ability of the firm to harness its resources through marketing strategy, and the impact on business performance, is dependent on the competitive context within which the firm operates. “A strategy that would be highly successful in one competitive context, might fail dismally in another.” (Hunt, 2015:66).

Resources are defined as the tangible and intangible entities available to the firm to enable it to produce an effective or efficient market offering (Hunt & Morgan 1995). The organisation combines its financial, physical, legal, organisational, informational and relational resources to produce products/services, organise distribution channels and develop communication/promotion. Hence, the marketing mix serves as the manifestation of these resources (Thoeni, Marshall & Campbell 2016). Each firm will have at least some resources that are unique and cannot be easily copied which provide a distinctive marketing mix. In seeking to gain superior financial performance, the firm may choose to alter one or more elements of the marketing mix. Adaptations of the marketing mix require resources that are varied, imperfectly mobile and incur additional cost.

We suggest that not only the firm’s but the competitors’ resources are likely to impact on the effectiveness of a firm’s marketing strategy. We consider internal marketing mix variables as the manifestation of firms’ and competitors’ resources and propose that the effectiveness of market strategy performance is a function of a firm’s internal marketing mix variables, external environmental factors and competitors’ marketing mix variables.

2.1. Internal and external variables and firm performance

A number of studies have examined internal variables and their impact on business performance (e.g., Akan et al. 2006; Cappel et al. 1992; Rudd et al. 2008; Stimpert and Duhaime 1997; Wright et al. 1995). Early applications examine a single or limited number of marketing variables at a time (e.g. Rao & Shakun 1972; Schmalensee 1978; Fornell, Robinson & Wernerfelt

1984; Thompson & Teng 1984). Research investigating the entire marketing mix is relatively limited (Hauser & Shugan 1983; Morgan et al. 2009; Rutledge & Wilson 1994; Wildt 1974). There have been various calls for more comprehensive models that employ all marketing mix variables and their impact on firm performance (Eliashberg & Chatterjee 1985; Gatignon et al. 1989; Hanssens 1980; Morgan 2012; Rutledge & Wilson 1994).

A second stream of research focuses on the impact of external variables on the effectiveness of strategy (e.g., Daft, Sormunen & Parks 1988; Jennings & Lumpkin 1992; McGahan & Porter 1997; Cummings & Daellenbach 2009). Daft et al. (1988) examine the task environment and general environment. McGahan and Porter (1997) examine the relative effects of four external factors on firm profitability and their interaction effects.

The inclusion of both internal and external variables in a single study is rare but not unprecedented (e.g., Carpenter et al. 1988; Montgomery & Wernerfelt 1991; Olson et al. 2005; Rutledge & Wilson 1994). However, in combining internal and external variables, only a few studies consider a firm's entire marketing mix in their examination of 'internal' strategy variables (e.g., Morgan et al. 2009; Rutledge and Wilson 1994), and only a limited number of studies include competitors' marketing mix variables as external environmental effects (e.g., Hanssens 1980; Rutledge and Wilson 1994). An overview of key studies is shown in Table 1.

[Take in table 1 near here]

2.2.Competitors' resources and firm performance

Explicit investigation of the impact of competitors' marketing mix variables on a firm's own resources and business performance is not common in marketing strategy studies, perhaps because data about competitive marketing actions are difficult to obtain. Hanssens (1980) states that research on competition in the market should explicitly examine the actions of competing firms. Moorthy (1985) similarly argues that the consequences of a firm's action depends not only on its own action

but also the actions undertaken by its competitors. The few existing studies that consider competitive actions employ competitive response elasticities and are estimated econometrically through empirical data (e.g., Lambin et al. 1975 from a single firm's perspective; Hanssens 1980; Rutledge & Wilson 1994 from an industry-wide perspective). Studies in marketing tend to focus on competitive actions in relation to changes in a firm's marketing mix (see Table 1). Most empirical studies examine the effect of competitive actions implicitly rather than explicitly; a firm's offering relative to its competitive offerings - relative price, relative quality or relative performance (e.g. Olson et al. 2005; Morgan et al. 2009; Powell & Dent-Micallef 1997; White 1986).

Consistent with the view of marketing strategy as dynamic, competitive and interactive (Hunt 2015) and responding to the call for empirical testing of simultaneous relationships between variables relating to strategy and environmental contingencies (Morgan 2015), we develop a conceptual model (Figure 1) to explicitly examine the impact of market strategy on firm performance among competing firms in a market. In addition to (internal) marketing strategy variables and external environmental factors, we include competitors' marketing mix variables and measure their direct impact on each firm's business performance. In doing so, we acknowledge Dekimpe and Hanssens's (2004) discussion of new directions for marketing modelling, particularly firms' reactions to competitors' marketing mix elements and evaluations.

[take in Figure 1 near here]

3. METHODOLOGY

3.1. Study context

The context of the study is the UK mainstream B2C car market, excluding specialist performance and sports car manufacturers, but including mainstream luxury car producers. According to the Society of Motor Trade Manufacturers¹, the Top 10 models sold during the study period were

¹ <https://www.smmmt.co.uk/wp-content/uploads/sites/2/articles/news/News/Facts%202005%20-%20final.pdf>

produced by only four manufacturers, accounting for over one third of all car sales. Hence, this suggests that whilst there are multiple firms in the market, competition is tightly focused among a small number of producers and this is a suitable context in which to study competitive impacts on strategy effectiveness. Fifteen car producers operating in this context in the UK were contacted to take part in the study. Seven agreed to take part, one of which subsequently withdrew. The remaining six firms accounted for over one third of the share of the UK passenger car market and included a spread of firms operating in different strategic groups and across different customer segments. The firms are defined as ‘mass’, ‘differentiated’ and ‘luxury’ car manufacturers; the sample comprised two of each.

3.2. Variable specifications and measures

Varadarajan (2010) notes marketing strategy concerns an organization’s “crucial choices” concerning marketing activities and resources, including financial and non-financial resources. This view resonates with the view of Morgan (2012) that marketing strategy is about harnessing both capabilities and resources, acknowledging that marketing strategy relies not only on direct marketing mix variables but also on additional resources to support them. Hence, the six internal variables account for the three key capabilities/resources of *marketing*, *operations* and *finance*. The marketing variables comprise: (1) advertising spending for passenger cars, (2) distribution outlets, (3) product mix, and (4) average price per unit. The first three should relate positively to profit (see Eliashberg & Chatterjee 1985). The influence of price could be either positively or negatively related to profit. Microeconomic theory of the firm explains the links between total profits and price elasticity of demand, total revenue, and total cost (Hanssens 1980; Stewart & Gill 1998). Following Keeler (1974), we average lagged advertising, which accounts for carryover effects from previous strategies, for the prior two years to minimise the loss of degrees of freedom.

Operations and finance are accounted for by: (5) net operating expenses and (6) debt level. The level of operating expenses rises with the level of sales and should relate positively to the level of profit. Rutledge and Wilson (1994) note that if the operating expenses’ coefficient is greater

(less) than 1.0, profits are rising faster (slower) than expenses, and economies of scale are being (not being) realised. An increased debt level to finance business expansion should have a positive influence on firm profit, but a negative sign may indicate an over-leveraged financial position.

The external environmental strategy factors are measured by: (7) market demand, (8) retail bank interest rate, and (9) retail petrol prices. These variables have relevance to the car market. We measure market demand according to consumer expenditures on passenger cars in real values; it should have a positive influence on firm profit. Interest rates and petrol prices both affect affordability and indirectly demand, and may have no or a negative effect in the non-luxury car end of the market.

To account for competitor effects, we include competitors' marketing mix variables in the model and examine their effect on each manufacturer's performance. The competitors' marketing mix variables likely influence a firm's own profit and also the profit of other competitors in the market. Competitors' advertising, distribution outlets and product variety variables probably have a negative effect on other firms' profits; but we expect the price variable to have a positive impact that reflects the cross-price elasticity effects.

Unlike Rutledge and Wilson (1994), who use operating profit as the dependent variable, we employ gross profit as the measure of firm performance because it: reflects the lowest level of profit for all companies in the sample; can be gathered from publicly available data sources; consistently indicates a positive value across all companies. Some companies in the sample had negative operating profit in some years. Negative values violate an assumption of natural logarithms and pose a problem for the model. Table 2 details the operationalisation of the variables and their expected effects on firm profit.

[take in Table 2 near here]

3.3 Data collection

For each variable we collected time-series data covering the period 2001-2008. We were unable to use very recent data for the internal variables due to commercial sensitivity, but the series collected is longer than those used in previous similar studies (e.g., Hanssens 1980; Lambin et al. 1975; Rutledge & Wilson 1994; Wildt 1974). Data for the external environmental variables were collected from publicly available sources. Data for the internal (marketing and non-marketing) strategy variables were derived from the financial statements of the six companies and verified against a database under SIC code 341000. Data for the marketing mix variables were derived from the MEAL report, *Summary of Brands and Advertisers*. This yielded only eight observations per variable per manufacturer, short of the recommended 20 observations per variable (Hair et al. 1998). To overcome this, with help from the firms involved, we converted the annual data to quarterly data (as suggested by Hanssens 1980), thus achieving 32 observations per variable per manufacturer.

3.4 Testing the model

Prior to model testing, the data were checked for any violations of statistical assumptions. The data set contains variables measured in index value (e.g., consumer expenditures), which likely are serially correlated, and also reflect seasonal variation coinciding with new car registrations in the third quarter. The variables were recorded in three different measurement units—value terms (e.g., advertising expenditure), unit terms (number of outlets) and ratios (retail bank interest rate) leading to possible non-linearity. To correct for this, we use a filter technique (similar to those used by Hanssens 1980 and Brockwell and Davis 1996) to transform the observations into linear functions. Filtering the data removes the deterministic trend portion from the series to eliminate serial correlation, which in turn makes the usual tests of significance applicable.

3.4.2 Simultaneous estimation using GLS

The first step of model testing involved estimating the six individual manufacturers' equations, which requires satisfying three conditions: each equation should be uniquely configured for each manufacturer participating in the study; the equations should capture internal, external and

competitor variables; the equations should be estimated to allow for comparisons of coefficients among variables and across equations. We use stepwise techniques to estimate the six individual manufacturers' equations at this stage.

The key objective, though, is to estimate the coefficients of each manufacturer's equation by taking into account the effect of competitors on the each manufacturer's strategy. Because of interdependence among firms competing in a market, we assume the variation in the dependent variable in any equation is influenced not only by the independent variables in the equation but also by other variables in other manufacturers' equations. In statistical terms, the dependent variable of any equation will be correlated with the error terms across the equations system. Therefore, we must re-estimate the six manufacturers' equations simultaneously using the econometric procedures of simultaneous estimation.

A unique feature of simultaneous estimation is that all coefficients in the equation system are estimated in a single procedure; however, a common problem with this method is the possible correlation among residuals across equations with ordinary least squares (OLS) (Gujarati 1988). Rutledge and Wilson (1994) suggest the use of seemingly unrelated regression (SUR) procedures instead of OLS to re-estimate the set of equations more efficiently, because SUR explicitly accounts for the potential of contemporaneous correlation and solves a set of regression equations simultaneously, which allows for error covariance among equations (Parker and Dolich 1986). The SUR method, also known as Zellner estimation, involves a two-stage estimation procedure that improves the efficiency of estimators compared with OLS by specifying the equations system as a single large equation, then estimating the equation using generalized least squares (GLS).

To re-estimate the coefficients of the model simultaneously, we structure the six individual manufacturers' equations previously estimated in the stepwise regression in a large equation. Mathematically, this equation can be simplified as:

$$\mathbf{Y}_i = \mathbf{X}_i \boldsymbol{\beta}_i + \mathbf{u}_i \quad i = 1, 2, \dots, 6, \quad (1)$$

where: \mathbf{Y}_i = an $N \times 1$ vector,

\mathbf{X}_i = an $N \times K_i$ matrix,
 β_i = a $K_i \times 1$ vector, and
 \mathbf{u}_i = an $N \times 1$ vector.

This large equation can be translated into matrix form, as suggested by Pindyck and Rubinfeld (1981):

$$\begin{bmatrix} Y_1 \\ Y_2 \\ Y_3 \\ Y_4 \\ Y_5 \\ Y_6 \end{bmatrix} = \begin{bmatrix} X_{11} & X_{12} & X_{13} & 0 & 0 & 0 \\ 0 & 0 & 0 & X_{21} & X_{22} & X_{23} \\ 0 & 0 & 0 & 0 & 0 & 0 & X_{31} & X_{32} & X_{33} \\ \dots & \dots & \dots & \dots & \dots & \dots & \dots & \dots & \dots \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & X_6 \end{bmatrix} \begin{bmatrix} \beta_1 \\ \beta_2 \\ \beta_3 \\ \dots \\ \beta_6 \end{bmatrix} + \begin{bmatrix} u_1 \\ u_2 \\ u_3 \\ \dots \\ u_6 \end{bmatrix} \quad (2)$$

Using STATGRAPHICS PLUS for Windows, we apply the GLS method to produce the final set of coefficients for the six car manufacturers.

4. MODEL OUTPUT AND FINAL RESULTS

4.1. Variables and estimated coefficients at manufacturer level

Table 3 illustrates the estimated variables that collectively explain the variability in the profit (dependent variable) of each manufacturer, as well as the resulting coefficients and level of significance. The R^2 values observed in Equations 3, 4 and 6 are very high, but expected due to: the use of time-series data rather than cross-sectional approaches (Brotman and Fox 1988); the use of GLS instead of OLS; the SUR method, where the variation in the dependent variable is explained not only by the independent variables and by all other independent variables in the model through the constant term. Our model estimates a large number (174) of variables simultaneously, and each has a power ‘hidden’ in the constant term, which in turn leads to the high R^2 values.

[take in Table 3 near here]

For each manufacturer at least four independent variables collectively explain the variability in its dependent variable (Table 3) and, with the exception of Luxury 2, two of these variables are competitors’ marketing mix variables. For example, for Mass 1, the equation indicates an operating

expenses elasticity of 0.510 and a market demand elasticity of 0.352; in addition, Differentiated 2's advertisement imposes a -0.825 elasticity and Luxury 2's price a 0.449 elasticity, explaining 89% of the variability in the dependent variable (profit). The standard error of the estimate shows the standard deviation of the residuals is 0.037, and the mean absolute error of 0.029 is the average value of the residuals. Of the 27 coefficients estimated, 23 are statistically significant at $p < .01$, and 4 are significant at $p < .05$. Table 3 also provides the R^2 values, F -statistics, and p -values for each equation.

On the basis of R^2 values ranging from 85.17% to 91.36%, we conclude that the estimated equations meet acceptable levels of significance and goodness of fit. In addition, we run four tests - linearity, homoscedasticity, independence of residuals, and normality of the error term distribution (Hair et al. 1998; Norusis 1993) - to examine any violation of statistical assumptions for the variate itself; no significant problems emerge.

4.2. Marketing strategy effectiveness

The key idea underlying the methodology adopted in this study is the use of the resulting coefficients, which we use to compare with the expected effects (+/-) of the variables in the model (see Table 3). If the resultant coefficient matches the expected effect of the variable and the collective effects of the entire set of variables are positive, a firm has developed an effective strategy. In other words, the collective positive effect means that a firm has utilised its resources effectively to maximise its opportunities and/or minimise threats, as well as capitalized on available opportunities to overcome its weaknesses. The opposite also is true; a collective negative effect indicates the firm has not been able to harness its resources appropriately, or does not have a competitive advantage in terms of its resources to develop an effective strategy.

We group the resultant coefficients into three categories. Internal (marketing and non-marketing) strategy factors (ISF) represent each company's internal resources. External strategy factors (ESF) represent environmental opportunities and threats. A combined ISF and ESF category

labelled TSF (total marketing strategy factors) represents the company's overall effectiveness in developing 'strategic fit' between internal resources and external opportunities (see Table 4).

The six manufacturers demonstrate varying degrees of effectiveness in harnessing their internal resources (marketing and non-marketing) in relation to external environmental effects (including competitor interactions) into an overall positive effect. Four Companies (Mass 1, Mass 2, Differentiated 1 & Differentiated 2) have achieved a reasonable degree of strategic fit between their internal and external strategy variables because they used their resources and/or the available opportunities to overcome their weaknesses and/or avoid emerging threats. The marketing strategies of Luxury 1 and 2 are offset by market and/or by competitive effects or are ineffective for this market.

[take in Table 4 near here]

5. DISCUSSION

This study offers an important step forward by providing an empirically validated model that assesses the relative impact of internal marketing resources, external environmental effects and competitive actions on business performance. The findings support our view that an understanding of the interplay between internal and external strategy variables, in particular competitor actions, is crucial for marketing strategy effectiveness.

5.1. Competitors' marketing mix effects

Each manufacturer's equation includes at least one competitor's marketing mix variable, and all coefficients are highly significant with the expected effect on profit, confirming the impact of competitive actions on marketing strategy effectiveness. Positive effects emerge for competitor prices in the equations of the two mass and differentiated car companies (companies 1 - 4) with effective strategies, but do not appear in the equations of the other two (luxury) manufacturers (5 & 6). This suggests that mass and differentiated car manufacturers' strategies are affected much more by competitors' prices than luxury car manufacturers are, which is not surprising. This suggests the

price sensitivity of the mass a differentiated customer segments versus the luxury segment customers. In terms of R-A theory, adaptations of the marketing mix require resources (Thoeni et al. 2016). According to Hunt (1995, p.323) a comparative advantage exists when “a firm’s resource assortment enables it to produce a market offering that, relative to extant offerings by competitors, is perceived by some market segment(s) to have superior value and/or can be produced at lower costs”. Due to the price-quality relationship (Völckner and Hofmann 2007) and the sacrifice effect of partitioned pricing (Völckner, Rühle & Spann 2012), the cost of a price reduction would not deliver superior value for either the customer or the firm.

Table 4 evaluates each manufacturer’s strategy and summarises the strategic variables that play a significant role in marketing strategy effectiveness. Different patterns of competitive action are evident among Mass 1, Differentiated 1 and Differentiated 2 in the form of cross-price elasticity and advertising effects. An increase in car prices by Mass 1 and Differentiated 1 potentially generates additional sales and increases the profit level of Differentiated 2. Similarly, an increase in car prices of Mass 1 and Differentiated 2 potentially creates additional sales and increases the profit for Differentiated 1. Hence, if Mass 1 raises its prices, customers may choose to upgrade to a differentiated producer (Differentiated 1 or 2). A negative effect on the profit level of Mass 1 results from the effective use of advertising by Differentiated 2. It also appears that close competition marks the relationship between Mass 2 and Differentiated 1 in this market. Mass 2’s equation reveals that the competitors’ marketing mix effects come exclusively from Differentiated 2, and the direction of the effects is mixed (positive price effect, negative distribution effect).

The process of competition between firms contributes to organisational learning (Hunt 2013, 2015). This suggests that when firms experience reduced financial performance from competitive disadvantage they attempt to neutralise or leapfrog advantaged firms by adjusting their resources. We can see this happening dynamically between both Mass and Differentiated firms as they attempt to harness their resources to gain a competitive advantage through price.

Somewhat unexpected are the results related to Luxury 1 and 2, which are affected by the marketing mix variables of Differentiated 2. Although Luxury 1 and 2 specialise in expensive luxury cars, Differentiated 2 does not. The results may be explained by customer segments that span the boundaries of luxury and mid-range cars whose demand may be sensitive to changes in internal and external factors.

6. CONCLUSIONS AND IMPLICATIONS

This study develops a multiplicative model that assesses the impact of internal and external variables and competitor marketing mix variables on firms' performance. Competitors' marketing mixes serve as external environmental (micro) effects, and the model outcomes evaluate the effectiveness of each manufacturer's marketing strategy. The results show that external factors, including competitors' marketing mix variables, exert greater influence on business performance than internal (marketing and non-marketing) strategy variables alone. The study makes both theoretical and managerial contributions.

6.1. Contribution to theory

Theoretically, we contribute to marketing strategy by responding to the call for empirical testing of simultaneous relationships between configurations of multiple variables relating to strategy and environmental contingences (Morgan 2015). Thus, we contribute to marketing strategy by providing a deeper understanding of the dynamic effects of internal and external factors that lead to marketing strategy effectiveness, extending previous work in this area (e.g., Lee & Griffith 2004; Morgan et al. 2009; Olson et al. 2005; Rutledge & Wilson 1994; Stimpert & Duhaime 1997).

Additionally, we account for the competitive process, which remains under-researched, by incorporating competitor action into the analysis. While a number of marketing activities/decisions may occur within the boundaries of the organization, customers respond to and competitors react to an organization's marketing activities in the marketplace. Thus, "marketing strategy conducive to

superior performance is contingent upon internal organizational factors and external environmental factors.” (Varadarajan 2015:90).

We also contribute to Resource-Advantage (R-A) theory specifically by considering the impact of competitors’ resources (as manifested through the marketing mix) on firm marketing strategy effectiveness. The foundational premises of R-A theory (Hunt 2000) identifies the importance of a firm’s resources to competitive advantage and the effect of competitive dynamics. Yet, a firm’s comparative advantage in resources can be neutralised by the external environment and the actions of competitors (Hunt and Morgan, 1995). Hence, the extent of marketing strategy effectiveness and firm performance is dependent not only on the resources of the firm, but the resources of competitors and how one affects the other within the context of a dynamic external environment. Our study confirms the importance of competitive resources, demonstrated by the marketing mix, on marketing strategy effectiveness over internal marketing strategy variables in five out of the six companies studied.

Our research also contributes to market orientation. We respond to calls for longitudinal research to explore the market orientation/performance relationship (Narver and Slater 1990) and to calls to consider the orientation of competitors (Kumar et al. 2011). Our research suggests that market orientation does not necessarily lead to a competitive advantage without taking into effect the market orientation of competitors and the potential impact of competitive action as a result.

6.2. Managerial implications

Our study suggests that managers and strategists should focus on identifying and measuring both internal strategy variables and external environmental effects directly rather than assuming that external effects have equal impact on all firms in the market. Rutledge and Wilson (1994, p. 221) argue that “managers can be misled into thinking that a strategy is effective or ineffective without knowing the true source effect that impacts the observed results”. Our results show varying effects of internal and external factors on firms’ performance. External effects have a greater influence on

firms' profit than internal strategy variables in most cases. Moreover, external variables do not influence all firms in a market equally, and competitor actions account for a significant impact.

This model can be built for an individual firm, taking into account the relevant external factors and. Firms can use such a model to benchmark their marketing strategy with that of other firms in the same market. By comparing a firm's specific marketing mix activities and performance against others, it can identify best practices and learn how to increase the effectiveness of its marketing instruments. Both market orientation and R-A theory suggest that competition promotes learning. Hence, this kind of analysis can help firms to innovate and develop. Due to the proprietary nature of some of the data required for such a benchmarking exercise, a third party (e.g., consultant) rather than the firm itself most likely should collect and analyse these data. The advantages of using a consultant are the potential to maintain distance between firms and their competitors, and gain access to potentially new ideas. The disadvantages are that consultants may not be as familiar with the context, firms may miss important learning opportunities by not being as close to the data, and there will be financial implications to undertake the analysis.

7. LIMITATIONS AND FUTURE RESEARCH

Our research is not free from limitations, which in turn introduce future research options. One limitation arises from the using a single study context. To fully determine the effect of competitor actions in relation to external environmental factors and internal factors a wider range of contexts need to be considered to determine whether these findings hold.

Competitors' effects seem to have a greater influence on marketing strategy effectiveness than other external factors, accounting for 11 of the 17 external variables estimated in the model. In each equation, the sum of the coefficient values for competitor effects is higher than the coefficient values for marketing variables, thus clearly showing which variables have the greater influence on marketing strategy development. Additional research should investigate if other external variables exist in other markets.

We recommend that research efforts focus on further development of our conceptual model to consider moderator variables and other performance-related variables. For example, the impact of a firm's advertising spending on firm performance could be weaker in situations in which competitors increase their advertising spending. Further research should examine whether the adjustment in internal marketing strategy variables can influence the impact of external effects, and vice versa. Finally, additional research might explore to what extent our findings are generalizable to services settings.

REFERENCES

- Akan, Obasi, Allen, Richard S., Helms, Marilyn M. and Spralls, Samuel A. (2006), "Critical Tactics for Implementing Porter's Generic Strategies", *Journal of Business Strategy*, Vol. 2, pp. 43-53.
- Brotman, Billie Ann and Fox, Pauline (1988), "The impact of Economic Conditions on the Incidence of Arson: Comment", *The Journal of Risk and Insurance*, Vol. 55, No. 4, pp. 751-754.
- Brockwell, Peter J. and Davis, Richard A. (1996), *Introduction to Time Series and Forecasting*, New York, Springer-Verlag.
- Calof, Jonathan L. and Wright, Sheila (2008), "A practitioner, academic and inter-disciplinary perspective", *European Journal of Marketing*, Vol. 42, No. 7/8, pp. 717-730.
- Capon, Noel, Farley, John U. and Hoenig, Scott (1996), *Toward an integrative explanation of corporate financial performance*, Kluwer Academic Publishers, Norwell, MA.
- Cappel, Sam, Wright, Peter, Kroll, Mark and Wyld, David (1992), "Competitive Strategies and Business Performance: An Empirical Study of Select Service Businesses", *International Journal of Management*, Vol. 9, pp. 1-11.
- Carpenter, Gregory S., Cooper, Lee G., Hanssens, Dominique M. and Midgley, David F. (1988), "Modeling Asymmetric Competition", *Marketing Science*, Vol. 7, No. 4, pp. 412-433.
- Clarke Darral G. and Dolan, Robert J. (1986), "A Simulation Analysis of Alternative Pricing Strategies for Dynamic Environments", *Journal of Business*, Vol. 57, No. 1, pp. S179-S204.
- Cummings, Stephen and Daellenbach, Urs (2009), "A Guide to the future of Strategy? The history of Long Range Planning", *Long Range Planning*, Vol. 42, pp. 234-263.
- Daft, Richard L., Sormunen, Juhani and Parks, Don (1988), "Chief Executive Scanning, Environmental Characteristics and Company Performance: an Empirical Study", *Strategic Management Journal*, Vol. 9, pp. 123-139.
- Dekimpe, Marnik G. and Hanssens, Dominique (2004), "Persistence Modelling for Assessing Marketing Strategy Performance", in C. Moorman and D. R. Lehmann (eds.), *Assessing Marketing Strategy Performance*, Marketing Science Institute: Cambridge, MA.
- Dishman, Paul L. and Calof, Jonathan L. (2008), "Competitive intelligence: a multiphasic precedent to marketing strategy", *European Journal of Marketing*, Vol. 42, No. 7/8, pp. 766-785.
- Dutta, Biblap K. and King, William (1980), "A Competitive Scenario Modelling System", *Management Science*, Vol. 26, No. 3, pp. 261-273.
- Eliashberg, Jehoshua and Chatterjee, Rabikar (1985), "Analytical Models of Competition with Implications for Marketing: Issues, Findings, and Outlook", *Journal of Marketing Research*, Vol. 22, pp. 237-261.
- Fornell, Claes, Robinson, William T. and Wernerfelt, Birger (1984), "Consumption Experience and Sales Promotion Expenditure", working paper, cited in Eliashberg, J. and R. Chatterjee (1985), *Journal of Marketing Research*, Vol. 22, pp. 237-261.
- Gatignon, Hubert, Anderson, Erin and Helsen, Kristiaan (1989), "Competitive Reactions to Market Entry: Explaining Interfirm Differences", *Journal of Marketing Research*, Vol. 26, pp. 44-55.
- Gujarati, Damodar N. (1988), *Basic Econometrics*, McGraw-Hill: New York.
- Hair, Joseph F., Anderson, Rolph E., Tatham, Ronald L. and Black, William (1998), *Multivariate Data Analysis*, New York: Macmillan Publishing Company.
- Hanssens, Dominique M. (1980), "Market Response, Competitive Behavior, and Time Series Analysis", *Journal of Marketing Research*, Vol. 17, pp. 470-485.
- Hanssens, Dominique M., Parsons, Leonard and Schultz, Randall L. (2001), *Market Response Models: Econometric and Time Series Analysis*, 2nd ed., Boston, MA: Kluwer Academic Publishers.

- Hauser, John R. and Shugan, Steven M. (1983), "Defensive Marketing Strategies", *Marketing Science*, Vol. 2, pp. 319-360.
- Hunt, S. D. (2000). A general theory of competition: Resources, competences, productivity, economic growth. Thousand Oaks: Sage Publications.
- Hunt, S. D. (2013). A general theory of business marketing: R-A theory, Alderson, the ISBM framework, and the IMP theoretical Structure. *Industrial Marketing Management*, 42(3), 283–293.
- Hunt, Shelby D. (2015), "The Theoretical Foundations of Strategic Marketing and Marketing Strategy: Foundational Premises, R-A Theory, Three Fundamental Strategies, and Societal Welfare", *Academy of Marketing Science Review*, Vol. 5, pp. 61-77.
- Hunt, Shelby D. and Derozier, Caroline (2004), "The normative imperatives of business and marketing strategy: grounding strategy in resource-advantage theory", *Journal of Business and Industrial Marketing*, Vol.19, No.1, pp.5-22.
- Hunt, S.D., and Morgan, R.M. (1995), "The comparative advantage theory of competition", *Journal of Marketing*, Vol.59, No.2, pp. 1–15.
- Hunt, S. D., and Morgan, R. M. (1996)," The resource-advantage theory of competition: dynamics, path dependencies, and evolutionary dimensions", *Journal of Marketing*, Vol.60, No.4, pp.107–114.
- Jaworski, Bernard J. and Kohli, Ajay K. (1993), "Market Orientation: Antecedents and Consequences", *Journal of Marketing*, Vol.57 (July), pp.53-70.
- Jaworski, Bernard J. and Kohli, Ajay K. (1996), "Market Orientation: Review, Refinement, and Roadmap", *Journal of Market Focused Management*, No.1, pp. 119-135.
- Jennings, Daniel F. and Lumpkin, James R. (1992), "Insights between Environmental Scanning Activities and Porter's Generic Strategies: An Empirical Analysis", *Journal of Management*, Vol. 18, pp. 791-803.
- Keeler, Theodore E. (1974), "Railroad Costs, Returns to Scale, and Excess Capacity", *Review Economics and Statistics*, Vol. 56, pp. 210-208.
- Kharabsheh, R. A., Jarrar, K. and Simeonova, B. (2014), "The impact of competitive strategies on responsive market orientation, proactive market orientation, learning orientation and organizational performance", *Journal of Strategic Marketing* Vol. 23(5), 423-435.
- Kotler, Peter (1965), "Competitive Strategies for New Product Marketing over the Life Cycle", *Management Science*, Vol. 12, pp. B104-B119.
- Kumar, V., Jones, Eli, Venkatesan, Rajkumar and Leone, Robert P. (2011), "Is Market Orientation a Source of Sustainable Competitive Advantage or Simply the Cost of Competing?" *Journal of Marketing*, Vol. 75, No., pp. 16-30.
- Lambin, Jean-Jacques, Naert, Philippe A. and Bultez, Alain (1975), "Optimal Marketing Behavior in Oligopoly", *European Economic Review*, Vol. 6, pp. 105-128.
- Lee, Chol and Griffith, David A. (2004), "The Marketing Strategy-Performance Relationship in an Export-driven Developing Economy: A Korean Illustration", *International Marketing Review*, Vol. 21, pp. 321-334.
- Leeflang, Peter S. H., Wittink, Dick. R., Wedel, Michael and Naert, Philippe A. (2000), *Building Models for Marketing Decisions*. Boston: Kluwer Academic Publishing.
- McGahan, Anita M. and Porter, Michael E. (1997), "How Much Does Industry Matter, Really?", *Strategic Management Journal*, Vol. 18, pp. 15-30.
- Montgomery, Cynthia A. and Wernerfelt, Birger (1991), "Sources of Superior Performance: Market Share Versus Industry Effects in the US Brewing Industry", *Management Science*, Vol. 37, pp. 954-959.
- Moorthy, Sridhar K. (1985), "Using Game Theory to Model Competition", *Journal of Marketing Research*, Vol. 22, pp. 262-282.
- Morgan, Neil A. (2012), "Marketing and business performance", *Journal of Academy of Marketing Science*, Vol. 40, pp. 102-119.

- Morgan, Neil A. (2015), "Commentary on Shelby Hunt's "The Theoretical Foundations of Strategic Marketing and Marketing Strategy: Foundational Premises, R-A Theory, Three Fundamental Strategies, and Societal Welfare"", *Academy of Marketing Science Review*, Vol. 5, pp. 91-97.
- Morgan, Neil A., Vorhies, Douglas W. and Mason, Charlotte H. (2009), "Market Orientation, Marketing Capabilities, and Firm Performance", *Strategic Management Journal*, Vol. 30, pp. 909-920.
- Naik, Prasad A., Raman, Kalyan and Winer, Russel S. (2005), "Planning Marketing Mix Strategies in the Presence of Interaction Effects: Empirical and Equilibrium Analysis", *Marketing Science*, Vol. 24, No. 1, pp. 25-34.
- Narver, John C. and Slater, Stanley F. (1990), "The Effect of a Market Orientation on Business Profitability", *Journal of Marketing*, Vol. 54, No. 4, pp. 20-35.
- Norusis, Marija J. (1993), *SPSS for Windows Base System User's Guide Release 6.0*, SPSS, Inc.: Chicago.
- Olson, Eric M., Slater, Stanley F. and Hult, G. Thomas M. (2005), "The Performance Implications of Fit among Business Strategy, Marketing Organization Structure, and Strategic Behavior", *Journal of Marketing*, Vol. 69, pp. 49-65.
- Parker, Thomas H. and Dolich, Ira J. (1986), "Toward Understanding Retail Bank Strategy: Seemingly Unrelated Regression Applied to Cross-Sectional Data", *Journal of Retailing*, Vol. 62, pp. 298-320.
- Parnell, John A., Koseoglu, Mehmet Ali, Long, Zhang and Yuanyuan, Wu (2011), "Is the competitive strategy-performance relationship consistent across developed and emerging nations? An assessment of China, Turkey and the USA", *International Journal of Business and Emerging Markets*, Vol. 3, No. 4, 317 – 338.
- Pindyck, Robert S. and Rubinfeld, Daniel L. (1981), *Econometric Models and Economic Forecast*, New York, McGraw-Hill.
- Powell, Thomas C. (1992), "Organizational Alignment as Competitive Advantage", *Strategic Management Journal*, Vol. 13, pp. 119-134.
- Powell, Thomas C. and Dent-Micallef, Anne (1997), "Information Technology as Competitive Advantage: The Role of Human, Business and Technology Resources", *Strategic Management Journal*, Vol. 18, pp. 375-405.
- Rao, Ambar G. and Shakun, Melvin F. (1972), "A Quasi-Game Theory Approach to Pricing", *Management Science*, Vol. 18, pp. 110-123.
- Rudd, John M., Greenley, Gordon E., Beatson, Amanda T. and Lings, Ian N. (2008), "Strategic planning and performance: Extending the debate", *Journal of Business Research*, Vol. 61, pp. 99-108.
- Rutledge, Daniel P. and Wilson, Dale R. (1994), "Evaluating Strategy with Internal and Environmental Effects: a Response Elasticities Approach", *Journal of Business Research*, Vol. 31, pp. 213-224.
- Sahi, G. K., Gupta, M. C., & Lonial, S. C. (2016), "Relating strategic market orientation and market performance: role of customer value types", *Journal of Strategic Marketing*, pp.1-21. DOI: 10.1080/0965254X.2016.124021.
- Schmalensee, Richard (1978), "A Model of Advertising and Product Quality", *Journal of Political Economy*, Vol. 86, pp. 485-500.
- Shalender, K., Singh, N. & Sushil (2017), "AUTOFLEX: Marketing Flexibility Measurement Scale for Automobile Companies" Vol. 25, No. 1. pp. 65-74.
- Srinivasan, Shuba, Pauwels, Koen, Hanssens, Dominique M. and Dekimpe, Marnik G. (2004), "Do Promotions Benefit Manufacturers, Retailers or Both?", *Management Science*, Vol. 50, No. 5, pp. 617-629.
- Stewart, Jon and Gill, Len (1998), *Econometrics*, Prentice-Hall Europe: London.
- Stimpert, J. L. and Duhaime, Irene M. (1997), "Seeing the Big Picture: The Influence of Industry, Diversification and Business Strategy on Performance", *Academy of Management Journal*, Vol. 40, pp. 560-583.

- Thoeni, Andrew T., Marshall, Greg W., and Campbell, Stacy M. (2016), "A Resource-Advantage Theory Typology of Strategic Segmentation", *European Journal of Marketing*, Vol.50, No.12, pp.2192-2215.
- Thompson, Gerald L. and Jinn-Tsair Teng (1984), "Optimal Pricing and Advertising Policies for New Product Oligopoly Models", *Marketing Science*, Vol. 3, pp. 148-168.
- Varadarajan, Rajan (2010), "Strategic marketing and marketing strategy: domain, definition, fundamental issues and foundational premises", *Journal of the Academy of Marketing Science*, Vol. 38, pp. 119-140.
- Varadarajan, Rajan (2015), "Strategic Marketing, Marketing Strategy and Market Strategy", *Academy of Marketing Science Review*, Vol. 5, pp.78-90.
- Varadarajan, Rajan and Jayachandran, S. (1999), "Marketing Strategy: An Assessment of the State of the Field and Outlook", *Journal of the Academy of Marketing Science*, Vol. 27, pp. 120-143.
- Völckner, F. and Hofmann, J. (2007), "The price-perceived quality relationship: A meta-analytic review and assessment of its determinants", *Marketing Letters*, Vol. 18, pp. 181-196.
- Völckner, F. Rühle A. and Spann, M. (2012), "To divide or not to divide? The impact of partitioned pricing on the informational and sacrifice effects of price", *Marketing Letters*, Vol.23, pp. 719-730.
- White, Roderick E. (1986), "Generic Business Strategies, Organizational Context and Performance: An Empirical Investigation", *Strategic Management Journal*, Vol. 7, pp. 217-231.
- Wildt, Albert R. (1974), "Multifirm Analysis of Competitive Decision Variables", *Journal of Marketing Research*, Vol. 11, pp. 50-62.
- Wonnacott, Thomas H. and Wonnacott, Ronald J. (1990), *Introductory Statistics for Business and Economics*, John Wiley & Sons: New York.
- Wright, Peter, Kroll, Mark, Pray, Bevalee and Lado, Augustine (1995), "Strategic Orientations, Competitive Advantage and Business Performance", *Journal of Business Research*, Vol. 33, pp. 143-151.

FIGURE 1 Conceptual model

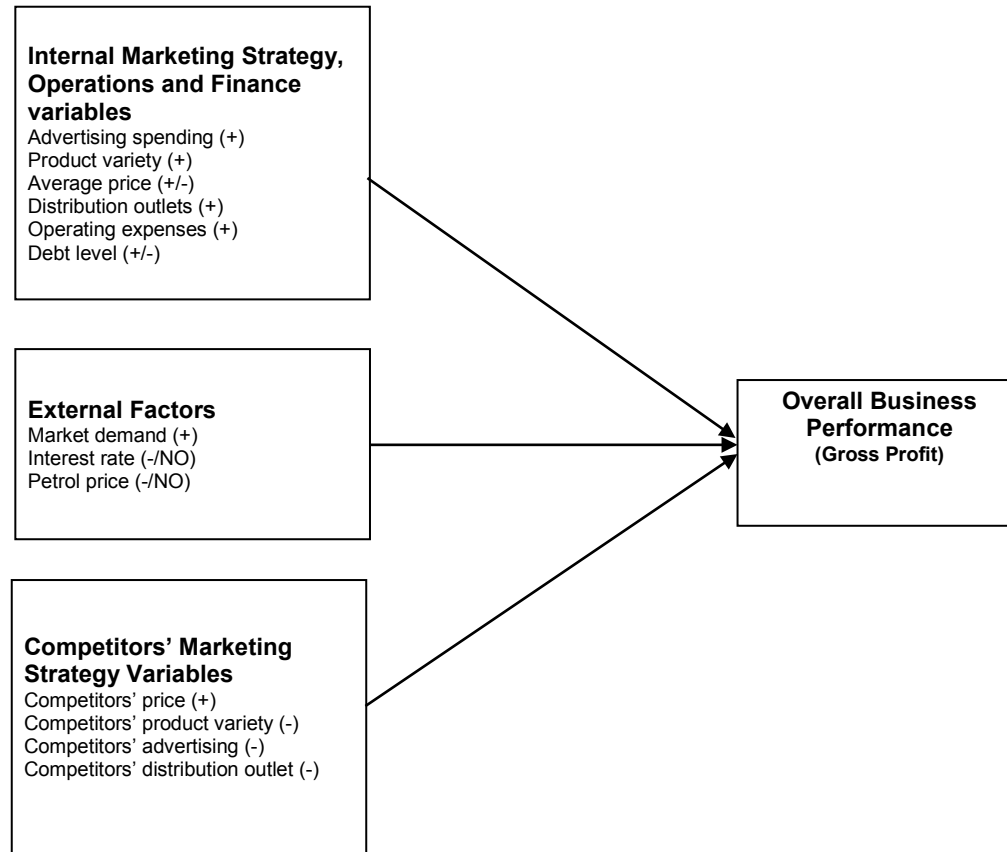


TABLE 1 Key studies explaining the strategy–performance link

Author(s)	Objectives	Independent variables (strategy)	Dependent variable (performance)	Competitive interactions
<i>Internal Variables</i>				
Kotler (1965)	Evaluating long-run competitive marketing strategies for a new product	Price, advertising, and distribution	Net profit and terminal market shares over a 60 month period of time	Explicitly considered
Wildt (1974)	Developing a simultaneous equation regression model of the competitive interaction among three major firms	Advertising, promotion, price and new products	Market share	Explicitly considered
Dutta & King (1980){	Evaluating alternative strategies in a competitive environment using meta-game analysis	Price and product quality	Profit and market share as criteria for the evaluation of competitive scenarios	Explicitly models the mutual anticipation process of specific strategy choices by the players in a market
Hauser & Shugan (1983)	Investigate defensive marketing strategy against a competitive new product	Pricing, distribution, product, and advertising	Profit	Explicitly analyze how firms react against new competitors' brands
Clarke & Dolan (1986)	Evaluate competitive strategies in a two major period (monopoly-doubly) situation	Price	Discounted profit over limit time horizon	Explicitly check for interaction effects by varying the parameters of model simultaneously
Sundaram <i>et al.</i> (1996)	Develop and implement a model to examine the effects of strategic competition on firm values	R&D expenditure	Firm's stock prices	Explicitly considered as what the impact of an R&D announcement of one firm on competitors' stock prices
<i>External Variables</i>				
Daft <i>et al.</i> (1988)	Measure different patterns of environmental scanning on business performance	Two sets of external (macro and micro) strategy variables	ROA as a measure of profitability	Not considered
Jennings & Lumpkin (1992)	Empirically examine the relationship between environmental scanning activities and generic strategy, firm size and performance	Four environmental scanning activities across two dimensions: opportunities and threats	ROA as a measure of profitability; total assets as a measure of firm size	Not considered
McGahan & Porter (1997)	Examine the relative effects of external strategic factors on profitability	Four external strategic factors: yearly macroeconomic fluctuations, stable industry effects, corporate-parent factors, and segment-specific effects	Accounting returns (profit)	Implicitly considered
<i>Internal and External Variables</i>				
Hanssens (1980)	Present a model of competitive interaction among three airline companies in the United States	Internal: flight frequency and advertising expenditures External: primary demand and competitors' marketing mix	Market share as performance measure	Explicitly considered
Powell (1992)	Investigating the financial performance consequences of organisational strategic alignment, using internal and external variables	Two sets of variables: economic variables and organisation alignment variables	Profitability	Implicitly
Rutledge & Wilson (1994)	Introducing a procedure for identifying both internal and external effects on firm profit	Nine independent variables (internal effect: advertising, retail stores, product variety, price, lagged advertising and two other internal functional effects; long-term debt and total operating costs. External effects: market demand, leather costs, and competitors' marketing mix variables) were used in this study comprising of seven internal firm effects and two external environmental effects	Operating profit	Explicitly considered
Stimpert & Duhaime (1997)	Examine the interactions of industry characteristics, diversification and business strategy and identify how these factors combine to influence performance	Industry characteristics, diversification, capital investment and R&D expenses	Weighted average of operating margins	Not considered

TABLE 2 Operationalisation of strategy variables and their expected effects on firm profit

No.	Variable	Units of measure	Source of data	Expected effect on profit
<i>Dependent Variable</i>				
Y	Gross Profits	Real £ gross profits in firm car market in £1000s	Company annual statements (SIC 341000)	
<i>Internal Strategy Variables</i>				
X1	Advertising spending for passenger cars ^a	Real £ advertising expenditure for passenger cars in £1000s, average lagged to account for carry over effects	MEAL Quarterly summary of Brands and Advertisers, 1990 -1997	+
X2	Distribution outlets ^b	Number of franchise outlets in the UK market	Market research of car retail, Mintel Group, 1997	+
X3	Product variety ^c	Number in firm's model range of passenger cars	SMMT Annual Reports, (production section)	+
X4	Average price per passenger car unit ^d	Real £ per passenger car unit Total turnover divided by Number of cars sold	– Turnover (annual statement) – Number of cars sold (SMMT annual reports)	+/-
X5	Net operating expenses	Real £ administration, selling and distribution expenses in million	Company annual statements (SIC 341000)	+
X6	Debt level	Total £ of current and long term debt on balance sheet in £1000s	Company annual statements (SIC 341000)	+/-
<i>External Factors</i>				
X7	Market demand (Personal consumption expenditure for cars)	Real £ million / consumer spending on vehicles (at current prices, not seasonally adjusted)	Monthly Digest of Statistics (Office for National Statistics)	+
X8	Interest rate	% of retail banks' base rate	Monthly Digest of Statistics (Office for National Statistics)	-/No
X9	Petrol prices	Retail prices of unleaded petroleum including VAT (pence per litre)	Digest of United Kingdom Energy (Office for National Statistics)	-/No

^aExpected effect of competitors' advertising: – ; ^bExpected effect of competitors' distribution: –; ^cExpected effect of competitors' product variety: –; ^dExpected effect of competitors' price: +

TABLE 3 SUR equation coefficients for each car manufacturer

Companies	Internal strategic variables					External variables				SUR Equation Evaluation			
	Advertising	Product variety	Distribution outlets	Average price	Debt level	Operating expenses	Market demand	Interest rate	Petrol price	Competitors' marketing mix	R ²	F-statistic	p-value
Mass 1						0.510372 (3.73194) ¹	0.351745 (3.30746) ¹			-0.824664 Advert-Mass1 (-5.96273) ¹ 0.4494 Price-Luxury2 (6.25366) ¹	89.12%	55.26	0.000
Mass 2			-9.75891 (-3.2633) ¹				0.584122 (2.67963) ²			49.1441 Price-Differentiated1 (8.54288) ¹ -1.70336 Distrib-Differentiated1 (-6.03235) ¹	85.17%	38.76	0.000
Differentiated 1	0.570864 (5.46983) ¹						0.479911 (4.35056) ¹			2.05627 Price-Luxury2 (4.96536) ¹ 0.196832 Price-Mass1 (2.5811) ²	97.57%	270.47	0.000
Differentiated 2					1.34669 (7.72207) ¹	-0.533533 (-2.59235) ²	13.8321 (11.6892) ¹			23.8056 Price-Differentiated2 (10.2369) ¹ 46.0869 Price-Mass1 (19.4646) ¹	98.21%	284.46*	0.000
Luxury 1	28.534 (7.61016) ¹								-5.65491 (-2.5731) ²	-6.48383 Advert-Differentiated2 (-5.07509) ¹ -19.8423 Distrib-Luxury2 (-6.88651) ¹	89.93%	60.24	0.000
Luxury 2		1.24761 (24.5639) ¹	-4.53931 (-11.0509) ¹	-1.97635 (-19.505) ¹	-0.533141 (-7.76225) ¹			-1.56128 (-5.21285) ¹		-18.2108 Distrib-Differentiated2 (-18.5606) ¹	99.36%	647.22	0.000

Notes: *t*-statistics are given in parentheses. Levels of significance for df = 31 are ¹ p< .01 and ² p< .05.

TABLE 4 Evaluation of companies' competitive marketing strategy, types of effect and extent of marketing strategy effectiveness

Companies	Evaluation of internal strategy factors (ISF)	Evaluation of external strategy factors (ESF)	Evaluation of total strategy factors (TSF)	Types of effect*			Strength on balance	Extent of effectiveness
				ISVE ^a	ESVE ^b	TSVE ^c		
Mass 1	Strength in operating expenses (+), but not strong enough (less than 1.0)	Competitor advertising a substantial threat not offset by the market demand opportunity and the positive effect of competitor pricing strategy (-)	Existing strength and available opportunities used in combination to overcome threat from competitor advertising strategy (+)	0.510	-0.024	0.487	ISVE	Effective
Mass 2	Significantly weak distribution strategy (-)	A rise in a competitor price was used effectively as a chance and coupled with market demand opportunity to offset the threat from competitor distribution strategy (+)	Available opportunities used effectively to overcome weakness and avoid threat from competitor distribution strategy (+)	-9.759	48.025	38.266	ESVE	Effective
Differentiated 1	Strength in advertising strategy (+)	Increased competitors' prices utilized along with market demand opportunity to maximise the positive effect of external variables (+)	Effective utilization of strength and available opportunities to overcome weakness and any emerging threats (+)	0.571	2.733	3.305	ESVE	Effective
Differentiated 2	The appropriate use of debt level (+) was good enough to overcome operating expenses weaknesses (-)	Great utilization of market demand opportunity and effective use of competitors' pricing strategies to maximise the positive signs of external effects (+)	Ideal use of strengths and opportunities to overcome existing weakness (+)	0.813	83.725	84.538	ESVE	Effective
Luxury 1	Strength in advertising strategy (+)	No concern of market opportunity. Competitors' advertising and distribution strategies have major damaging effects (-)	Existing strength unable to minimise emerging threat or to offset negative effects of competitors' marketing mix strategies (-)	28.534	-31.981	-3.447	ESVE	Ineffective
Luxury 2	Product strategy shows strength (+) but it was unable to offset weaknesses of distribution and pricing strategies (-)	Unexpected threat experienced from external environment plus problem from competitor distribution strategy (-)	Damaging weaknesses along with market threats caused an extremely ineffective implementation of competitive strategy (-)	-5.801	-19.772	-25.573	ESVE	Ineffective

*The figures calculated in these three columns derived from Table 3; ^a = internal strategy variables effects; ^b = external strategy variables effects; ^c = total strategic effects

